

Abstract

The present invention provides in one aspect a double-sided metal waveguide that can be utilized in a terahertz laser or amplifier operating in a range of about 1 THz to about 10 THz for mode confinement. For example, the double-sided waveguide can include two metallic layers each of which is disposed on a surface of an active region of a terahertz laser or an amplification region of a terahertz amplifier.

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